

No. 876,226.

PATENTED JAN. 7, 1908.

S. S. PEARL.  
DRAG SAW GUIDE.  
APPLICATION FILED JAN. 12, 1907.

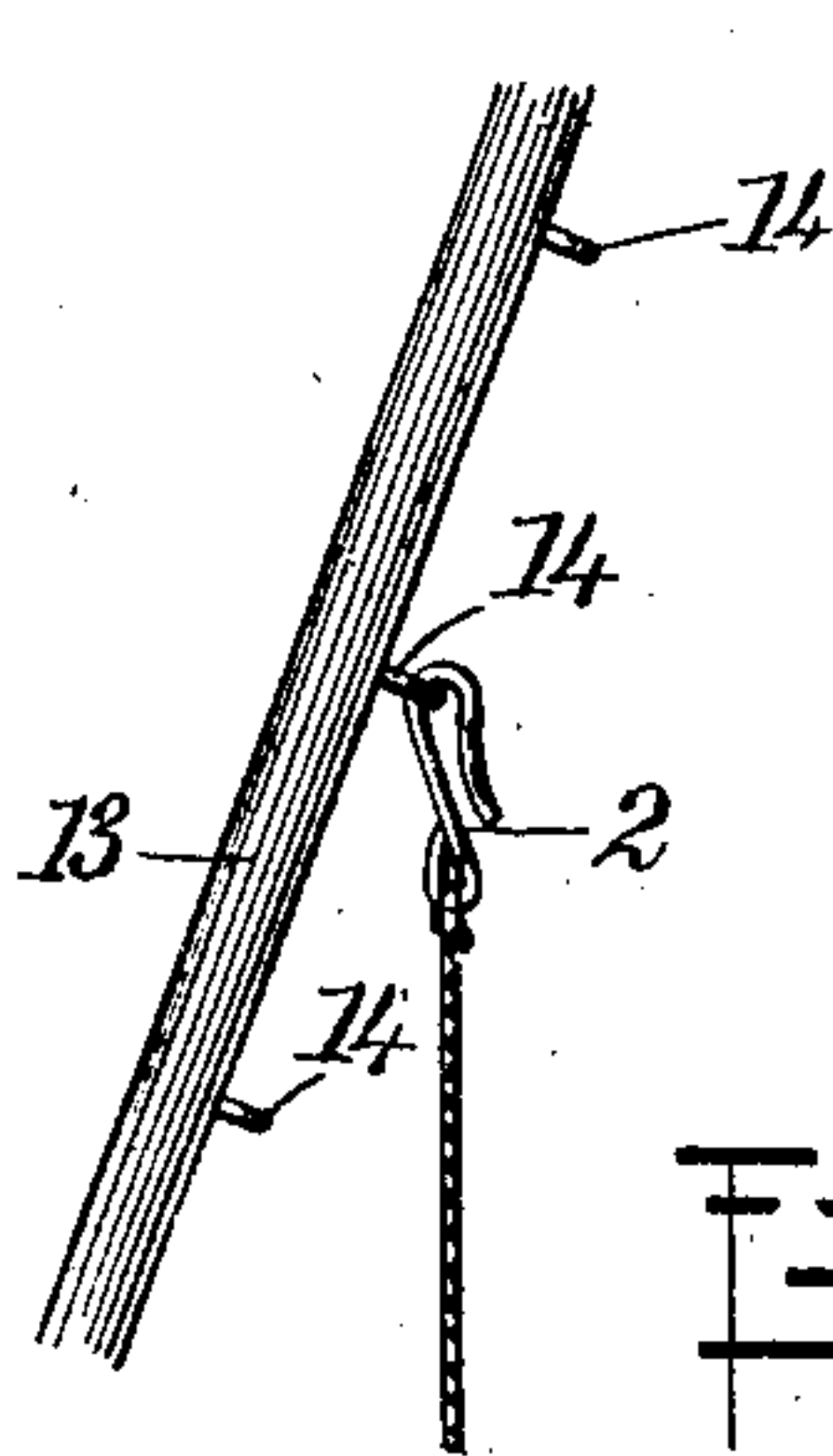


Fig. 2.

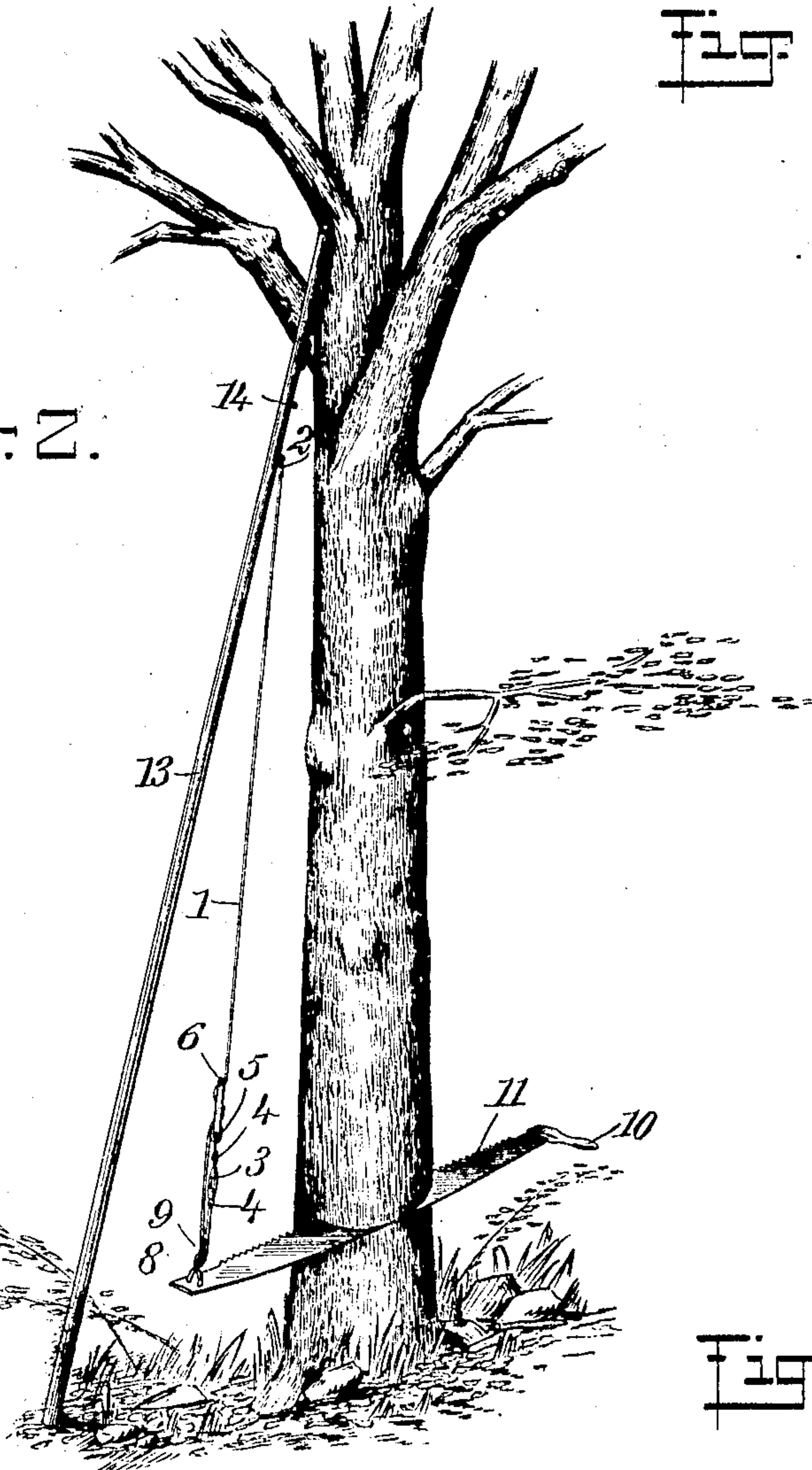
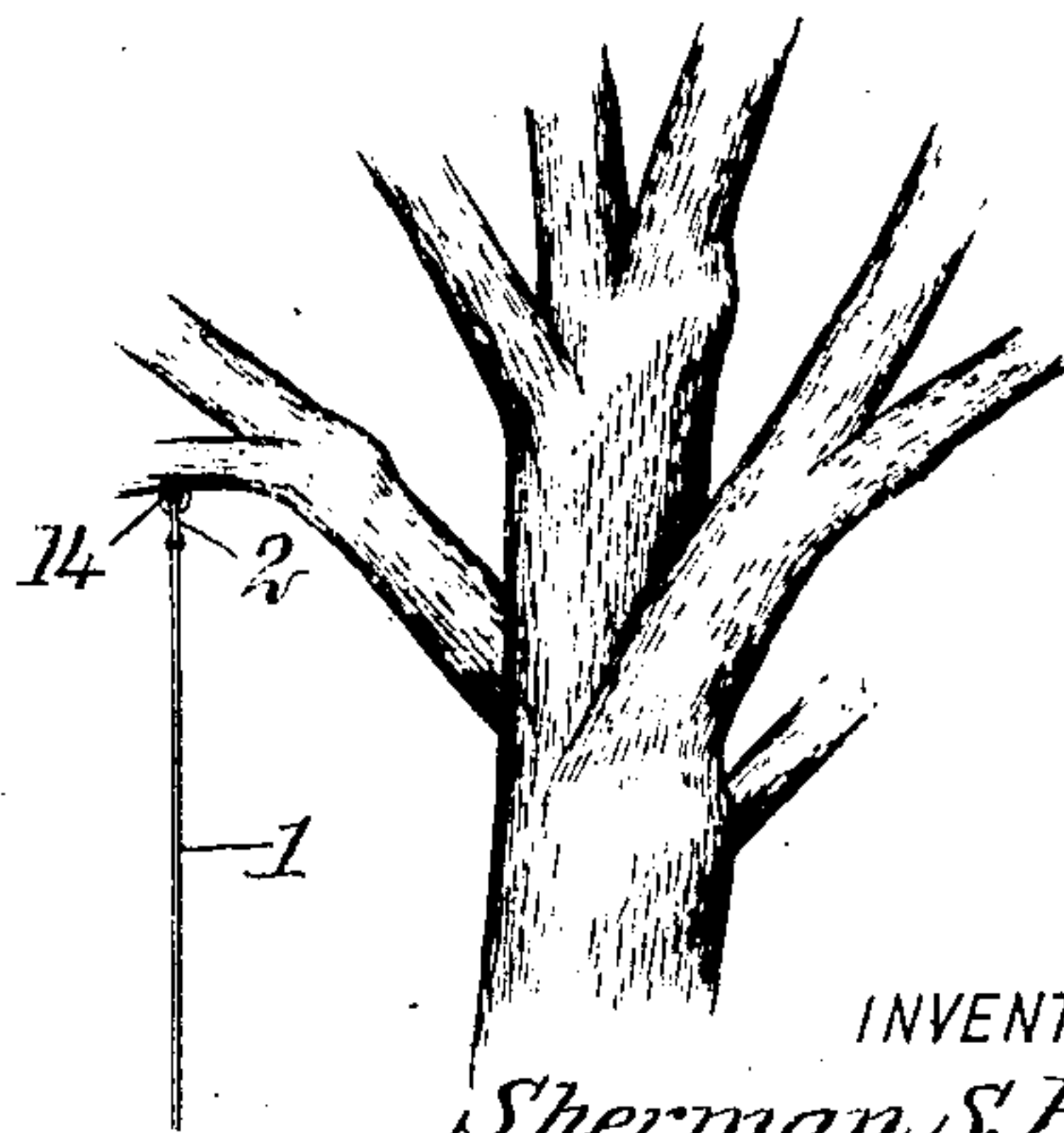


Fig. 1

Fig. 3.

WITNESSES

*John H. Brachvogel*  
*John H. Brachvogel*



INVENTOR  
*Sherman S. Pearl*  
BY *Mum & Co*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

SHERMAN S. PEARL, OF STEHEKIN, WASHINGTON.

## DRAG-SAW GUIDE.

No. 876,226.

Specification of Letters Patent.

Patented Jan. 7, 1908.

Application filed January 12, 1907. Serial No. 351,948.

*To all whom it may concern:*

Be it known that I, SHERMAN S. PEARL, a citizen of the United States, and a resident of Stehekin, in the county of Chelan and State of Washington, have invented a new and Improved Drag-Saw Guide, of which the following is a full, clear, and exact description.

This invention relates to drag-saw guides.

The object of the invention is to provide a simple, strong and durable guide for drag or cross-cut saws, which may be used in felling standing trees, or sawing up fallen timber, and by means of which it is possible for a single person efficiently and rapidly to operate a large saw.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, in which

Figure 1 is a perspective view of my invention as applied to a saw used in felling a standing tree; Fig. 2 is a side elevation of my invention, showing parts broken away and a part in cross section; and Fig. 3 is a view of a part of a tree, showing the detail of a modified form of my invention.

Before proceeding to a more detailed explanation of my invention, it should be understood that it is customary to use large drag or cross-cut saws in cutting down trees or in sawing up fallen timber, the saws being provided with handles at each extremity and thus adapted to be operated by two or more persons, one grasping each of the handles. The blades of these saws are thin and flexible, so that if the saw were used by but a single operator alternately pulling and pushing at one end, the opposite end of the blade would bend from its own weight when in a horizontal position, thereby causing the saw to bind in the cut. My device consists, substantially, of a cord, chain or the like, adapted to have one end secured to a fixed support located above the saw, and having means for securing the opposite end to an extremity of the saw blade; thus when the saw is drawn back and forth by the operator grasping a handle at the opposite end of the blade, the first extremity is properly supported at substantially the level of the cut, thereby preventing the blade from bending or binding.

Referring more particularly to the drawings, 1 represents a flexible member, which may consist of a cord, chain, wire or any other suitable material. The upper end of the flexible member 1 is provided with a hook 2, while the other end of the flexible member has a swivel 3 of conventional form, provided with eyes 4 at each end by means of one of which it is attached to the cord 1. An eye 4 of the swivel 3 is provided with a link 5, which is pivoted in a proper opening in the block 6 of a friction clamp, having perforations 7 through which the flexible member 1 is passed alternately from one side to the other, as appears most clearly in Fig. 2. Between the friction clamp and the swivel the cord is passed through the eye 9 of a hook 8, which is adapted to engage either with a handle 10 at one end of the saw, or with the holes 12 provided near the end of the saw blade 11 for the attachment of the handle 10 by means of screws or bolts.

For the purpose of cutting down standing trees, I prefer to provide a pole or rod 13, of light wood or other suitable material, and of a suitable height. Near one end of the pole 13, which is adapted to rest upon the ground with its upper end leaning against the trunk of the tree, as appears most clearly in Fig. 1, is a number of staples or screw-eyes 14, provided for the engagement of the hook 2 to furnish a fixed support for the cord 1 above the saw blade. By providing a number of staples 14 the length of the cord above the saw blade may be adjusted within certain limits. For a more exact adjustment of the length of the flexible member, I provide the friction clamp 6, which is of the usual form, and when held in a substantially horizontal position, it is possible to pull the cord through the perforations 7, thereby lengthening or shortening the cord, as the case may be; but when in the position shown in Fig. 2, the friction of the cord within the perforations is such that the block cannot slide or move upon the flexible member. Thus it is possible to adjust the length of the cord with great exactitude, and thereby provide a support for the free end of the saw blade in substantially the plane of the cut made by the saw. It will be understood that the end of the flexible member being drawn back and forth with the saw blade describes the arc of a circle, and the length of the cord, which represents the radius of the circle, is such that the arc described at



the end of the cord and the extremity of the blade, is so flat as to have no binding effect upon the course of the saw in the cut.

My device can be efficiently operated without the use of the pole 13, for instance, as shown in Fig. 3, where a staple 14 for engagement with the hook 2 is driven into a convenient branch above the saw blade. For cutting up timber lying upon a steep hillside where the blade of the saw is in a vertical plane rather than a horizontal one, the cord may be attached to a stake driven in the ground on the hillside above the log to be cut up, or may be secured to the log itself at a point higher than the cut.

The construction of my invention is such that it is maintained at all times at a distance from the cut, and, therefore, in no way interferes with the driving of wedges into the cut to widen the same and thereby obviate any binding upon the blade. The swivel 3 prevents twisting of the cord and permits the movement back and forth of the same with little friction.

My device will be found especially advantageous and effective in felling timber on steep hillsides, enabling work to be conducted by a single person, which usually requires the services of two operators.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A device of the class described, comprising a drag-saw, a rod adapted to be placed against a tree, a cord having means for adjusting the length of the same and adapted to be removably secured to said rod, at a

plurality of points and means for removably attaching said cord to said drag-saw.

2. A device of the class described, comprising a drag-saw, a rod adapted to be placed against a tree, a cord having means for adjusting the length of the same and adapted to be removably secured to said rod at a plurality of points on the same, and a hook mounted upon said cord and adapted to attach to a drag-saw at an end of the same.

3. A device of the class described, comprising a rod adapted to be placed against a tree, a cord having a friction clamp at one end adapted to adjust the length of said cord, means for adjustably securing said cord to said rod, and a hook mounted upon said cord and adapted to attach to a drag-saw at an end of the same.

4. A device of the class described, comprising a rod adapted to be placed against a tree, a cord having a hook adapted to attach at an end of a drag-saw, and means for securing said cord adjustably to said rod, said cord having at one end a swivel and a block having perforations, constituting a friction clamp attached to said swivel, said cord passing through said perforations from one side of said block to the other side of said block in alternation.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SHERMAN S. PEARL.

Witnesses:

SAM B. HILL,  
M. B. MALLOY.